

The Heterodyne

Newsletter of the West Valley Amateur Radio Association

October Meeting

**Highlights of WVARA's
VHF and CQP Expeditions
by Bobby Barnett, KA4VBF**

**Wednesday October 14
Meeting Starts at 7pm**

Meeting Location:
American Red Cross,
Silicon Valley Chapter
2731 N. First Street at Plumeria Dr
(southwest corner) in San Jose

Map at www.wvara.org/meetings.html

WVARA Repeaters (W6PIY)		
Band	Frequency	PL
6 Meters	52.580- MHz	151.4 Hz
2 Meters	147.39+ MHz	151.4 Hz
1.25 Meters	223.96- MHz	156.7 Hz
0.70 Meter	441.35+ MHz	88.5 Hz
0.23 Meter	1286.2- MHz	100 Hz

Club Net

WVARA's club net is on the W6PIY repeaters each Tuesday at 8:30 pm. All repeaters are linked together during the net. The net script can be found at www.wvara.org/net.html.

Visitors Are Welcome!

President's Letter

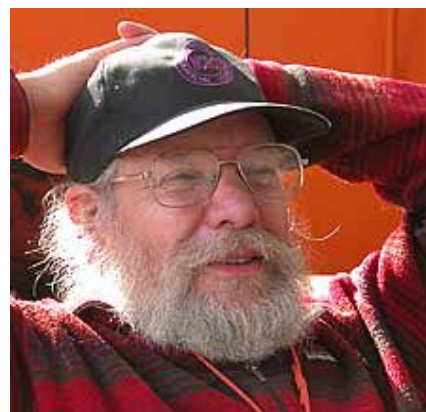
This Year's Contest Expeditions

This year the West Valley Amateur Radio Association ran 3 contest expeditions; Field Day, the September ARRL VHF Contest, and the California QSO Party (CQP). All of these events were a lot of fun, and they were very different events.

We seem to have the Field Day operation dialed in. QRP for some number of transmitters chosen to maximize our chance of setting a new record. Our GOTA operation is an example for other Field Day operations. Our operators get huge numbers of QSOs. The VHF/UHF/Satellite stations add some QSOs and give us a presence on more bands. We end up with a good score and a lot of fun.

This year was our first year in the ARRL VHF Contest. We camped out on Mt. Diablo and made a bunch of QSOs. We watched the poles for our station sun shade get bent out of shape by the winds, so we set up a real tent which carried us through the weekend.

We were called by a number of club members, which helped our score and gave us a chance



to have quick chats with our friends. Some, including John Glass, NU6P came and visited our operating site on the mountain.

One of the things I learned from the VHF contest is that I can't identify duplicate calls using a paper log. One of the other contestants said that it is much better to have two operators, one of whom checks for duplicates while the other is operating the radio. I personally like contest logging programs which include the check.

The VHF contest seems to be a very relaxed contest, where, if you are trying to call a station, another competitor may tell what frequency he is currently using. This kind of cooperation between competitors makes the contest seem like the goal is to maximize the total score of all the participants. Whether our score comes up in the top ranks or not, we had a great time and learned a lot about VHF contesting.

Our CQP operation was kind of like a miniature Field Day. We had three two K3s and an KX3, with two for SSB and one for CW. For antennas, we had a tower trailer and a bunch of wire antennas in trees. Unlike Field Day, we were running 100 watts on each station. Since the site was hot spring campground, and very audio noise sensitive, we were running on battery power.

The weather got nasty on us just after dark. Thunderstorms in the area were threatening nearby lightning, and the winds were strong. We lowered our tower, disconnected the radios and rode out the storm. We decided to wait until daylight to raise the tower, so operations during the night depended on low wire antennas. In spite of the weather's interference with operations, we managed to contact all 58 multipliers.

In the beginning, the radio frequency interference between the stations was manageable, but by Sunday morning, it was up to a S9 level. Swapping to fresh batteries corrected the problem. It is well known that when the power supply voltage drops, K3s have a problem with distortion, and we experienced it. I have a N8XJK Boost Regulator on order to protect against sagging battery voltage. It has received good reviews and we'll see if it can keep things quiet in future battery operated contests.

Being set up at a hot spring resort, when you weren't operating, you could go soak in a hot spring. Very California! Needless to say, we had a ball.

73, Bill - AE6JV

About the Meeting



The WVARA Team Atop Mount Diablo during the ARRL September VHF Contest

This month's WVARA meeting will be on Wednesday, October 14. Our presenter, Bobby Barnett (KA4VBF), will cover "Highlights of WVARA's VHF and CQP Expeditions". As most of you already know, our club recently participated in a pair of exciting expeditions – to the top of Mount Diablo for the ARRL VHF Contest and to a rare county during last month's California QSO Party. The WVARA participants at each of these events had a real blast and have brought back plenty of stories and photos to share.

Meeting Location: Silicon Valley Chapter of the American Red Cross, 2731 N. First Street at Plumeria Drive (southwest corner) in San Jose. Visitors are welcome!

If you haven't been to the Red Cross, "talk-in" is usually available on the Association's repeaters. Best choice would be 2m/220.

And for those who are hungry, several of us will be eating dinner prior to the meeting at the Burger King at 2532 Channing Avenue, just off Seaboard Avenue and near the corner of Trimble Road and De La Cruz Boulevard. <http://mapq.st/3-I0rpFmro>

Club Web Page: www.wvara.org

Hope to see you there!
Jim Peterson, K6EI

WVARA CQP Expedition to Sierra County a Huge Success! By Jim Peterson, K6EI



The Sierra County CQP Mini-DXpedition Team:
L to R (back row): George Williams (N6NKT), Svend Jensen (KF6EMB),
Greg DesBrisay (N6GD), Peri Frantz (KI6SLX), Bill Frantz (AE6JV),
L to R (front row): Bobby Barnett (KA4VBF), Jim Peterson (K6EI)

Seven adventurous WVARA members participated in this year's California QSO Party from one of our state's rarest counties. The California QSO Party, commonly known as CQP, occurs each fall during the first weekend in October, which this year was 3-4 October. Hams across the country (and from around the world) attempt to make a clean sweep by contacting all 58 counties. While many California counties are heavily populated with lots of hams, there are a dozen or more counties with very few active amateur radio operators. Rare and sparsely-populated counties are typically activated by mobile and/or expedition teams – and can attract a lot of on-the-air excitement from county hunters near and far.

This is the third year that WVARA has operated portable in the CQP. The previous two years we operated from Kings County, which is located in the Central Valley southwest of Fresno. This year we chose Sierra County (about a dozen miles north of Truckee.) Sierra County has a very limited ham population and is located high in the beautiful Sierra Nevada – making it a perfect match for our club. Since no other club had volunteered to operate from that location, we did!



WVARA's CQP Set-up in Sierra County

A CQP expedition is defined as an operation from a temporary location using temporary antennas installed only for use during the contest period. Our station was located in the campground at the Sierraville Hot Springs Resort and consisted of three Elecraft transceivers: two 100 watt HF/SSB stations, and one 100 watt HF/CW station. Svend Jensen, KF6EMB, brought his tower trailer and was our site manager. He did an excellent job of guiding our efforts to get the WVARA antenna farm installed. By dinner-time on Friday we had installed

- 40/80/160 meter dipole up 45 feet with matching triplexer
- 40 meter self-supported dipole up 55 feet (oriented for the Midwest and East Coast)
- 40 meter NVIS dipole up 30 feet (oriented for working the West Coast)
- 10/15/20 meter triband Yagi with triplexer

The contest ran for 30 hours – from 9am Saturday until 3pm on Sunday. Since we were running 100 watts on HF, we didn't attempt to put more than one transmitter on a given band. Even so, we did encounter some minor interference from our 40m station and the stations on the upper bands. This was quickly resolved by setting up a separate 40m dipole about 150 feet away from our main tower.

It was no surprise that there were lots and lots of hams excited to make contact with our county! On CW, Greg and Jim found themselves managing pile-ups of stations eager for Sierra County, while many of the phone contacts were concluded with a “thanks again for the new county!”

The big excitement of the weekend was the arrival of thunder and lightning at 7pm Saturday evening. We chose to lower the tower and take a snooze-break until after the “fireworks” (and pouring rain) had subsided.

We're still in the process of crunching the numbers, but let it be said that we had a great time and are looking forward to participating in CQP again next year!

September ARRL VHF Contest

By Bobby Barnett – KA4VBF

The ham bands above 30 MHz often don't get the credit they deserve. They certainly don't have the propagation swagger of The Great Ones down low, but there's something there. The antenna size, availability of equipment, reasonable range, and connection reliability make bands like 2m and 70cm the goto bands for repeaters, both ham and commercial. Split the difference and head to 6m, and you could be surprised with some contacts a few states over – or dead air (it happens often). There are lots of other ham bands that don't get a huge amount of activity (ie- 1.25m, 33cm, 23cm) but allow for interesting projects, links, and experimentation. One contest that exercised all of these higher frequency bands from 1800 UTC on Sep 12 to 0259 UTC on Sep 14 was the September VHF Contest, and that's what we went out and tried.

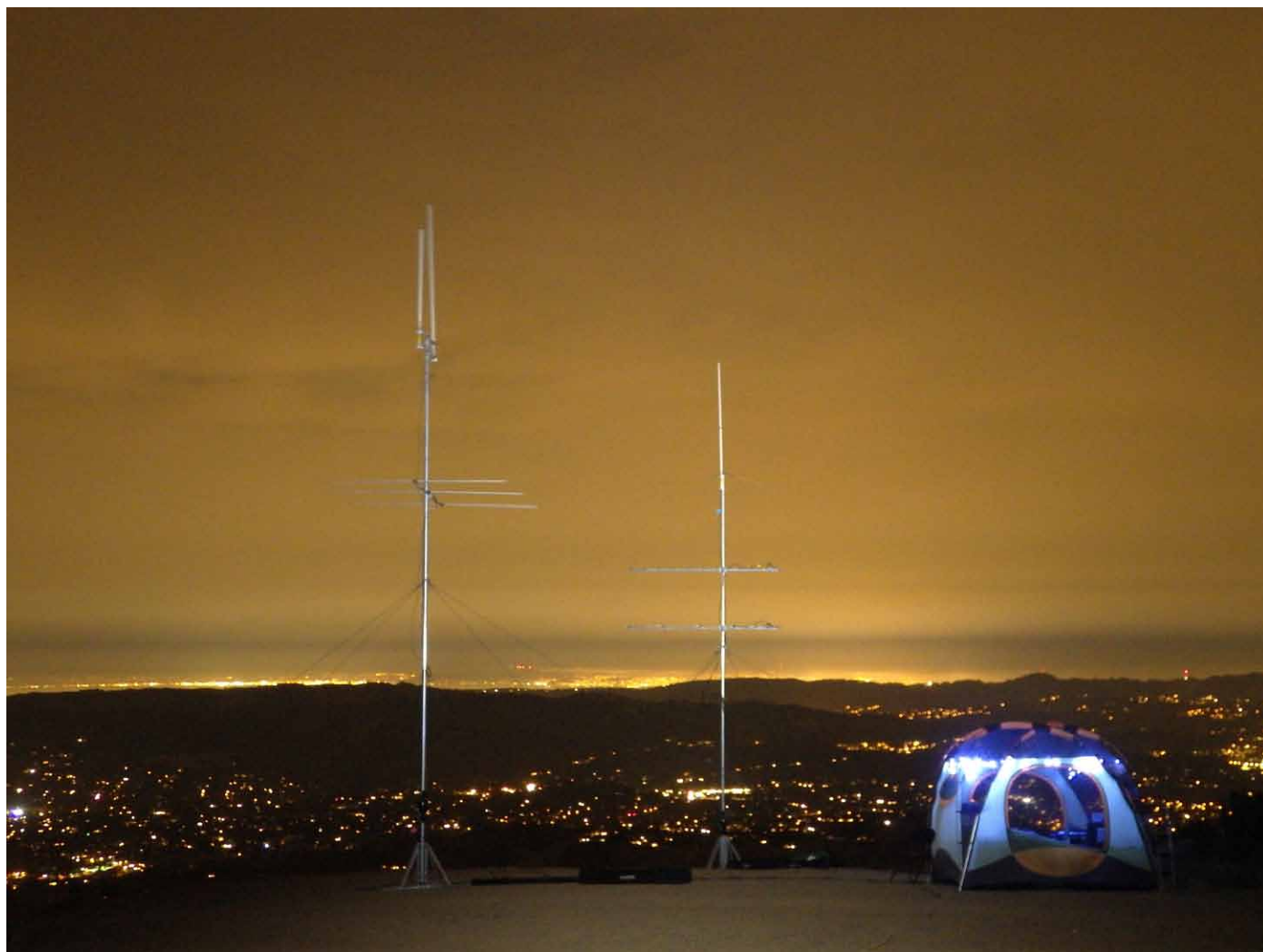
The approach we took was very Field Day like, with a site about 3000' up the side of Mount Diablo with big antennas and a bunch of radios in a tent in the back of Juniper campground. The ranger at the park was very open to us coming up, and was quite familiar with ham radio from all the groups who preceded us at their events and outings. Here was our setup:

- Bill Frantz (AE6JV) ran the 6m KX3 with 100w amplifier (SSB), along with a 3 element beam on a rotatable mast.
- Bobby Barnett (KA4VBF) worked the 2m/70cm IC-9100 (SSB and some FM) with an 8 dB gain vertical, a 7 element 2m yagi, and a 14 element 70cm yagi as antennas on a separate rotatable mast.
- Tom Dunbar (W6ESL) ran his 2m/1.25m/70cm radios (all FM) with some high gain verticals on one of the masts.
- We had 200w of solar panels, which helped the two 75 A-h and one 26 A-h batteries last longer than we expected, which gave rise to some estimates for the upcoming CQP and some ideas for later outings.
- Jon Griffiths (W6PI), Kevin Smith (KK6VF), John Glass (NU6P), and George Williams (NT6S) all signed up as rovers, to drive around between grid squares, make contacts, and submit their scores as both individuals and as additive to the WVARA affiliated club entry.

Mother nature, however, wasn't nearly as cooperative as all the fine people we contacted on the air. What started as a blisteringly hot Friday turned into a blustery cool Saturday which later turned into a very smoky and hot Sunday. At one point, it got so windy that the tarp started ripping and one of the poles bent. When the solar panels started sliding across the ground, we finally decided it was time to ditch the tarp and setup the spare tent that Bill so wisely brought with him.



On the air, it was busier than the VHF tent at Field Day ever was. Lots busier. There were several pileups over the course of the contest, and while that is a frequent occurrence at HF contests, it doesn't happen often higher up. The downside of the limited range we could expect on these bands was that after about 10 hours, our non-duplicate QSO rate was getting pretty low. As a test, I popped up to the summit with my car to see what would happen. Over the next hour, I logged another 40 QSOs, half of which were not in the logs of the station down in the campground. In the end, I tallied up 8 unique grid squares across 160 QSOs (52 on 6m, 50 on 2m, 22 on 1.25m, and 36 on 70cm) for a grand total of 1744 points.



It's always nice to talk with the campers and hikers that come by to ask questions, and this was no exception. One camper a few sites over had his buddy pole out, which looks to be a pretty well done antenna that packs down to a very small space. It would be interesting to do an antenna comparison one day. Perhaps a Saturday project? Measure signal levels of a remote station on 5 different antenna types? Hmm...another topic for another day.

All in all, it was a fantastic trip with fantastic people, and I am very glad we went out and tried something new. This particular contest series (it is held three times each year) holds some interesting possibilities about how it could be done to both up the score considerably while reducing the time and effort commitment. Perhaps that would make it possible for a few more folks to join in and have as much fun as the rest of us did.

WVARA Net Check-Ins (W6PIY)							
Every Tuesday at 8:30 PM							
Call Sign	Name	09/08/15	09/15/15	09/22/15	09/29/15	10/06/15	10/13/15
AA6RB	Roy	X	X	X	X	X	X
AE6JV	Bill	X				X	
AF6AE	Bill	X	X				X
KC6KRS	Clark				X		
KF6EMB	Svend		X	X		X	X
KF6UTE	Casey				X		
KI6BDR	Keith			X			
KI6NVN	Ethan	X					
KI6SLX	Peri					X	
KJ6CQJ	Dean		X			X	
KJ6GMO	Sue		X			X	
KJ6ZZI	Michael	X	X	X		X	X
KK6GSH	David		X				
KK6VF	Kevin	NET	NET	NET		NET	NET
KK6VSI	Rex	X	X	X	X	X	
KK6WQB	Alex					X	
KS6PD	Steve	X	X			X	X
KX6B	Dick	X		X			
N6NKT	George				X		
NU6P	John	X					
W6ESL	Tom		X				X
W6HOC	Howard	X	X	X		X	
W6IA	Mark	X	X	X	X	X	X
W6MNL	Steve				X		
W6PK	Phil		X		X		
WB6KHP	Dave	X	X	X	NET	X	X
TOTAL		13	15	10	9	14	9

Callsign Change
Mark Sayre, formerly KA6AMB,
is now W6IA

2015 West Valley Amateur Radio Association Board

President: Bill Frantz, AE6JV
Vice President: Jim Peterson, K6EI
Secretary: Scott Emery, AD6RY
Treasurer: Jon Kelley, K6WV
Directors:
Chuck Kamas, AD6CL
Dennis Lyden, AG6HE
Svend Jensen, KF6EMB
Brian Goldberg, KG6BKI
Kevin Smith, KK6VF
John Glass, NU6P
Dave Schultheis, WB6KHP

The Heterodyne is published monthly by the West Valley Amateur Radio Association and sent to all club members via the web. Please obtain permission from the author to re-publish any article in this publication.

Club Web Page: <http://www.wvara.org>
Heterodyne Editor: Phil Verinsky, W6PK
Internet Postmaster: Phil Verinsky, W6PK
Meeting Refreshments: Kevin Smith, KK6VF
Repeater Trustee: Chuck Kamas, AD6CL
Webmaster: Larry Goodwin, KG6ENF

Speaker Committee:
John Glass, NU6P
Scott Emery, AD6RY
Jim Peterson, K6EI
Jon Kelley, K6WV
Phil Verinsky, W6PK

DX Special Interest Group:
Dennis Lyden, AG6HE

Club address:
West Valley Amateur Radio Assn
P.O. Box 6544
San Jose, CA 95150-6544